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EXAMINER

DAHBOUR, FADI H

ART UNIT PAPER NUMBER

3743

DATE MAILED: 10/16/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/745,619

Applicant(s)

BENZ ET AL.

Examiner

Fadi H. Dahbour

Art Unit

37483

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 6-11, 14-19, 28 and 30 is/are allowed.
- 6) ☒ Claim(s) 3-5, 12, 13, 20, 21, 23, 26, 27, 29, 31-36 and 39-44 is/are rejected.
- 7) ☒ Claim(s) 22, 24, 25, 37 and 38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. The Examiner acknowledges Applicant's submission of the amendment filed on 9/11/03. Claims 1 and 3-44 are now pending.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. At line 1 of each claim, after the word "claim" should be inserted the number --1--. Corrections are required.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 12, 13, 34-36, 39-40, 42-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Hunt ('513).

Regarding claim 12, Hunt discloses a method for making an electrically insulating material (see "dielectric products" in line 2 of abstract, also see "insulated cable" in lines 61-62 of col.1) comprising polymerizing at least one monomer (see "polyolefin material suitable for" in line 1 of abstract) comprising at least one voltage stabilizing agent (see "voltage stability...by the inclusion of..." in lines 3-4 of abstract).

Regarding claim 13, Hunt discloses a method of making an electrically insulating material (see "dielectric products" in line 2 of abstract, also see "insulated cable" in lines 61-62 of col.1), comprising copolymerizing at least one first monomer comprising at least one voltage stabilizing agent and at least one second monomer (see "cross-linking of... low density and high density polyethylene, the polypropylenes and ethylenepropylene rubber" in lines 31-33 of col.2, also see "voltage stabilizing" in line 40 of col.2) to yield a polymeric electrically insulating material (see "dielectric products" in line 2 of abstract, also see "insulated cable" in lines 61-62 of col.1).

Regarding claims 34-36, 39 Hunt discloses a polymer blend comprising a first polymer comprising at least one linked voltage stabilizing agent and a second polymer (see "cross-linking of... low density and high density polyethylene, the polypropylenes and ethylenepropylene rubber" in lines 31-33 of col.2, also see "linked voltage stabilized" in line 69 of col.1), wherein the first polymer comprises a polymer selected from the group consisting of a silicone, a polyurethane, a polyolefin, a polyacetal, a polycarbonate, a polyvinyl, a polyamide, a polyimide, a polyacrylic, a polystyrene, a polysulfone, a polyetherketone, a cellulosic, a polyester, a polyether, a fluoropolymer, and copolymers thereof (see lines 32-33 of col.2), wherein at least one of the first and second polymers is crosslinked (see "cross-linking" in line 31 of col.2), an electrically insulating material comprising the polymer blend (see "dielectric products" in line 2 of abstract, also see "insulated cable" in lines 61-62 of col.1).

Regarding claim 40, Hunt discloses a highly loaded polymer comprising at least one linked voltage stabilizing agent (see "linked voltage stabilized polyolefin" in lines 69-

70 of col.1) in an amount greater than about 50% by weight (see "aromatic oil...greater voltage stability...substituting polychlorinated biphenyls for aromatic oils...60 percent by weight" in lines 4, 7-8, 14-15, 19-20 of col.2).

Regarding claims 42-44, Hunt discloses a method for making a polymer blend comprising blending a first polymer comprising at least one linked voltage stabilizing agent with a second polymer (see "cross-linking of... low density and high density polyethylene, the polypropylenes and ethylenepropylene rubber" in lines 31-33 of col.2, also see "linked voltage stabilized" in line 69 of col.1), wherein blending is effected by physical admixing, melt blending, solvent casting or dissolution (see "conventional mixing and blending techniques" in lines 34-35 of col.2), wherein the first polymer is a highly loaded polymer comprising at least one linked voltage stabilizing agent (see "linked voltage stabilized polyolefin" in lines 69-70 of col.1) in an amount greater than about 50% by weight (see "aromatic oil...greater voltage stability...substituting polychlorinated biphenyls for aromatic oils...60 percent by weight" in lines 4, 7-8, 14-15, 19-20 of col.2).

6. Claims 12-13 are rejected under 35U.S.C.102(b) as being anticipated by Schlag et al.

Regarding claim 12, Schlag discloses a method for making an electrically insulating material (see "cable insulation" in line 6 of col.1) comprising polymerizing at least one monomer comprising at least one voltage stabilizing agent (see "styrene... is mixed with the ethylene" in lines 56-57 of col.2, also see "also contains conventional additives" in line 60 of col.2, also see "addition of agents which retard the formation of water trees" in lines 20-21 of col.1, also see "stabilized to voltage stress" in line 65 of col.1).

Regarding claim 13, Schlag discloses a method of making an electrically insulating material (see "cable insulation" in line 6 of col.1), comprising copolymerizing at least one first monomer comprising at least one voltage stabilizing agent and at least one second monomer (see "styrene...is mixed with the ethylene" in lines 56-57 of col.2, also see "also contains conventional additives" in line 60 of col.2, also see "addition of agents which retard the formation of water trees" in lines 20-21 of col.1, also see "stabilized to voltage stress" in line 65 of col.1) to yield a polymeric electrically insulating material (see "cable insulation" in line 6 of col.1).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 20-21, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wampler et al in view of Hunt ('513).

Wampler discloses an implantable medical device (Figs.1-16, also see "implantable" in line 1 of abstract) comprising an electrically insulating material (see "insulated cable" in lines 54-55 of col.4).

Wampler lacks a polymeric component comprising at least one linked voltage stabilizing agent. Hunt discloses a polymeric component comprising at least one linked voltage stabilizing agent (see "linked voltage stabilized polyolefin" in line 3 of column 4). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the features taught by Hunt, in the insulated cable of Wampler, because Hunt teaches that it is suitable for use in insulated cables (see "insulated cable" in lines 61-62 of col.1 of Hunt).

9. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wampler et al in view of Schlag et al.

Wampler discloses an implantable medical device (Figs.1-16, also see "implantable" in line 1 of abstract) comprising an electrically insulating material (see "insulated cable" in lines 54-55 of col.4).

Wampler lacks a voltage stabilizing agent. Schlag discloses a voltage stabilizing agent (see "addition of agents which retard the formation of water trees" in lines 20-21 of col.1, also see "stabilized to voltage stress" in line 65 of col.1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the features taught by Schlag, in the insulated cable of Wampler, because Schlag teaches that it is suitable for use in cable insulation (see "cable insulation" in line 1 of abstract of Schlag).

10. Claims 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Belden et al in view of Hunt ('513).

Belden discloses an implantable medical lead selected from the group consisting of a cardiac pacing lead, a tachycardia lead, and a neurological lead (Figures 1-4) comprising an electrically insulating material (see "insulated cable" in line 3 of col.3).

Belden lacks a polymeric component selected from the group consisting of a silicone, a polyurethane, a polyamide, a polyimide, and a polyester-bis-amide copolymer, wherein the polymeric component comprises at least one linked voltage stabilizing agent. Hunt discloses a polymeric component selected from the group consisting of a silicone, a polyurethane, a polyamide, a polyimide, and a polyester-bis-

amide copolymer, wherein the polymeric component comprises at least one linked voltage stabilizing agent (see lines 69-70 of col.1, also see lines 31-33 of col.2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the features taught by Hunt, in the insulated cable of Belden, because Hunt teaches that it is suitable for use in insulated cables (see "insulated cable" in lines 61-62 of col.1 of Hunt).

11. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt ('513).

Hunt, as described above, discloses all the features claimed except the linked voltage stabilizing agent being present in an amount greater than about 70% by weight. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the linked voltage stabilizing agent being present in an amount greater than about 70% by weight, in the device of Hunt, because 70 is reasonably close to 60, and Hunt teaches that it is acceptable to have an amount reasonably close to 60 (see "about 60" in line 20 of col.2 of Hunt).

12. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bothe et al in view of Hunt ('513).

Bothe discloses a capacitor comprising a solid dielectric layer comprising an electrically insulating material (see "suitable for use as an electrically insulating film, as a dielectric in an electrical capacitor" in lines 3-5 of abstract) comprising a polymeric component (see "polypropylene can be used" in line 21 of col.4).



Bothe lacks the polypropylene comprising at least one linked voltage stabilizing agent. Hunt discloses polypropylene comprising at least one linked voltage stabilizing agent (see "linked voltage stabilized polyolefin composition which comprises...polypropylenes" in lines 3, 4, 6 of col.4). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the features taught by Hunt, in the device of Bothe, because Hunt teaches that it results in high voltage stability (see "high voltage stability" in lines 2-3 of abstract of Hunt).

13. Claims 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cansell et al in view of Hunt ('513) and Roenisch et al.

Cansell discloses an electrically insulating capacitor electrolyte fluid comprising silicone (see "a capacitor corresponding to the invention composed of...a liquid dielectric consisting of silicone oil" in lines 36, 38-39).

Cansell lacks at least one linked voltage stabilizing agent. Hunt discloses at least one linked voltage stabilizing agent (see "linked voltage stabilized..." in line 3 of col. 4). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the features taught by Hunt, in the silicone oil of Cansell, because Roenisch teaches that silicone oil is capable of receiving additives for the purpose of voltage stability (see "silicone oil...may contain voltage stabilizing additives" in lines 30-32 of col.5 of Roenisch).

14. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okoshi et al in view of Hunt ('513) and Roenisch et al.

Okoshi discloses an adhesive comprising an electrically insulating material comprising silicone (see "preferred examples of the adhesive... silicone oils" in lines 14 & 20 of col.6). Okoshi lacks at least one linked voltage stabilizing agent. Hunt discloses at least one linked voltage stabilizing agent (see "linked voltage stabilized..." in line 3 of column 4). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the features taught by Hunt, in the silicone oil of Okoshi, because Roenisch teaches that silicone oil is capable of receiving additives for the purpose of voltage stability (see "silicone oil... may contain voltage stabilizing additives" in lines 30-32 of col.5 of Roenisch).

#### ***Allowable Subject Matter***

15. Claims 1, 6-11, 14-19, 28, 30 are allowed.
16. Claims 3-5 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
17. Claims 22, 24-25, 37-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fadi H. Dahbour whose telephone number is 703-306-5479. The examiner can normally be reached on M-F, 9am-5:30pm est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry A. Bennett, can be reached on (703) 308-0101. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.



Fadi H. Dahbour  
Examiner  
Art Unit 3742